the distal ends. The axle of the example wheelbarrow **200** is tubular, though axles of rectangular, triangular, or other prism shapes can be substituted without departing from the spirit of the invention. In one or more embodiments, the axle **230** extends longitudinally along and is capable of rotation about an axis transverse to the longitudinal axes of the frame support members **210**, **215**. For example, the axle can be substantially perpendicular to the frame support members. The axle **230** can be supported at least partially above or extend below the frame support members and can be rigidly fixed between the opposing inner surfaces of the frame support members. As can be seen from, for example, FIG. **2**D, the axle **230** for the example wheelbarrow **200** extends above the frame support members **210**, **215**. The axle **230** is fixed to an outer surface of a front portion **245** of the load bucket **205** by a first end of a pair of upper struts **235**, **240**. The second end of each upper strut **235**, **240** is fixed to the axle **230** near the proximal and distal ends of an upper surface of the axle. A pair of lower struts **250**, **255** is fixed to the axle **230** near the proximal and distal ends of a lower surface of the axle, in which the lower struts support the axle. In one or more embodiments, the upper struts **235**, **240** and lower struts **250**, **255** interconnect to form a rigid structure connecting the front portion **245** to the frame support members **210**, **215**. In one or more embodiments, the upper and lower struts are affixed through or to the proximal and distal ends of the axle **230**.

[0043] A key feature of axle **230** is that it provides a pivot point for the moment arm of the frame support members **210**, **215**. The pivot point can be centrally located on the axle **230**, which is advantageous for coupling the axle to a wheel **260** to the pivot point. The wheel **260** is rotatably mounted about a rotational axis that is substantially perpendicular to the longitudinal axis of the axle. The wheel **260** extends at least partially below the axle **230** and between and at least partially below the frame support members **210**, **215**. In one or more embodiments, the wheel **260** can be fixed directly to the axle **230**, or coupled to the axle by passing the axle through a channel disposed below an arcuate upper portion of the wheel.

[0044] The axle **230** can be coupled to the wheel **260** in any manner reasonable in the art in order to enable a sensor **265** to determine the orientation and type of force imparted upon the frame support member **210**, **215** and load bucket **205** structure (e.g., the moment arm) as it interacts with the pivot point of the axle **230**. For example, if a user imparts a rotational force to the frame support members **210**, **215** (e.g., lifting the frame support members in a direction away from the ground in order to unload the load bucket **205**), the axle **230** rotates in a way measurable by a sensor **265**. For example, the sensor **265** can measure the angle at which the frame support members **210**, **215** depart from a resting position. Similarly, the sensor **265** can measure if a longitudinal force is applied (e.g., longitudinal force **170** in FIG. **1**B).

[0045] The sensor **265** can include one or more sensors capable of sensing and differentiating between the different force types described hereinabove. In one or more embodiments, the sensor **265** is a gyroscopic sensor. The gyroscopic sensor can include any of the type known in the art which are capable of sensing rotational motion and changes in orientation, including the variety described in the aforementioned patents that have been incorporated by reference. In one or more embodiments, the sensor **265** senses when a user rotates the axle **230** via changing the angle of the frame support members **210**, **215** relative to the longitudinal axis that the frame support members occupy in a rest position. In one or more embodiments, the sensor **265** includes a balance control system for sensing external forces, such as the direction and magnitude of a force applied to the frame support members **210**, **215**.

[0046] Depending on the type of force that the sensor **265** senses, a signal is output to a motor **270**. The motor **270** can be of any type known in the art, which is capable of driving the wheel **260** to rotate and thus drive the wheelbarrow **200** in a transport direction. In one or more embodiments, the motor **270** is included within the wheel **260**, such as within a wheel housing. Alternatively, the motor **270** can be coupled to any other component in the wheelbarrow **200** that is suitable for receiving a signal from sensor **265** and from which it can appropriately drive the wheel **260**.

[0047] If the control system receives from the sensor **265** a signal that a longitudinal force has been applied to the frame support members **210**, **215** (e.g., a pushing or pulling motion) then the sensor **265** outputs an energizing signal to the motor **270**, instructing the motor to accelerate or decelerate the wheel in accordance with the direction and magnitude of the applied longitudinal force. If the sensor **265** senses that a rotational force (e.g., a vertical force applied at the frame support members **210**, **215**) has been applied at the pivot point of the axle **230**, then the control system can provide a signal that instructs the motor **270** to not active and/or not accelerate the wheel **140**. Such a control signal can be coded with an instruction to activate the motor at a zero setting, which is tantamount to sending an off signal, or to send an instruction to maintain the current velocity, precisely as noted above. In addition, settings for control signals can be user configurable in certain embodiments, as described above. Alternatively, the control system can impede an energize signal from being sent to the motor **270** in response to the rotational force being sensed, or a rotational force beyond a lift off of the ground. In one or more embodiments, if a prescribed rotational force is applied, such as one that is clearly more than a lift off of the ground, the controller can send a signal to the motor **270** instructing it to deactivate the wheel. In one or more embodiments, in which the wheelbarrow **200** at rest is in contact with the ground, such as via legs **220**, **225**, the sensor **265** and/or its balance control system can be configured to send an energizing signal to the motor **270** upon an applied longitudinal force only if a small rotational force is applied first, such as the vertical force necessary to raise the wheelbarrow a predetermined distance off the ground. For example, the sensor can require that the longitudinal and vertical forces be applied simultaneously to drive the wheel **260**. In this way, the wheelbarrow **200** can be prevented from moving in a translational direction while it is at rest.

[0048] Notably, the figures and examples above are not meant to limit the scope of the present application to a single embodiment, as other embodiments are possible by way of interchange of some or all of the described or illustrated elements. Moreover, where certain elements of the present application can be partially or fully implemented using known components, only those portions of such known components that are necessary for an understanding of the present application are described, and detailed descriptions of other portions of such known components are omitted so as not to obscure the application. In the present specification,